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EXAMINER	
STARKS, WILBERT L	
ART UNIT	**PAPER NUMBER**
2129	

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/887,824	HUBBELL ET AL.	
	Examiner	Art Unit	
	Wilbert L. Starks, Jr.	2129	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 May 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-54* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-54* is/are rejected.

7)☒ Claim(s) *12,15,19,21 and 32* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claims 1-54 have been examined. The following action is NONFINAL.

Claim Objections

1. Claims 12, 15, 19, 21, and 32 are objected to because the claims have no ending periods, so it is unknown whether there is more that is intended to be claimed by Applicant. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, claim 18 has improper multiple dependencies claimed in the conjunctive, rather than in the disjunctive. On that basis, the claim is so indefinite that it cannot be further examined on the merits in this action. Appropriate correction is required.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. §101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

the invention as disclosed in claims 1-17 and 19-54 is directed to non-statutory subject matter.

5. Claims 1-9, 19-27, 37-45 are clearly not claimed to be practiced on a computer, therefore, it is clear that the claims are not limited to practice in the technological arts. On that basis alone, they are clearly nonstatutory.

6. Regardless of whether any of the claims are in the technological arts, none of them is limited to practical applications in the technological arts. Examiner finds that *In re Warmerdam*, 33 F.3d 1354, 31 USPQ2d 1754 (Fed. Cir. 1994) controls the 35 USC §101 issues on that point for reasons made clear by the Federal Circuit in *AT&T Corp. v. Excel Communications, Inc.*, 50 USPQ2d 1447 (Fed. Cir. 1999). Specifically, the Federal Circuit held that the act of:

> ...[T]aking several abstract ideas and manipulating them together adds nothing to the basic equation. *AT&T v. Excel* at 1453 quoting *In re Warmerdam*, 33 F.3d 1354, 1360 (Fed. Cir. 1994).

Examiner finds that Applicant's "goal" references are just such abstract ideas.

7. Furthermore, Applicant has amended the language to recite: "...the goal being **associated** with a training objective of a student." The word "associated" is undefined

and it is unclear whether this word limits the claims to statutory subject matter. Applicant asserts that the "training objective of a student" "limitation" makes the claims statutory, but it is unclear what this phrase has to do with the invention beyond a vague "association" with it. Is the association a close one where the goal is the "training objective", or is it a loose one where they were simply made or considered at the same time...or even just some mental association. Applicant's added phraseology does not clarify these issues and does not limit the claim to statutory subject matter. As such, it makes the disclosure nonstatutory in nature.

8. Further, in claim 10, Applicant recites that the "feedback" or display of information "motivates" accomplishment of a goal. "Motivation" is a human thought and the inclusion of it does not make the invention statutory. Patents are not available for persuasive speech or persuasive information displayed to a user. Such things do not define a composition of matter, apparatus, method, or product of manufacture. They are simply non-functional data not embodied on any medium.

9. Examiner bases his position upon guidance provided by the Federal Circuit in *In re Warmerdam*, as interpreted by *AT&T v. Excel*. This set of precedents is within the same line of cases as the *Alappat-State Street Bank* decisions and is in complete agreement with those decisions. *Warmerdam* is consistent with *State Street*'s holding that:

> Today we hold that *the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price*, constitutes a practical application of a mathematical algorithm, formula, or calculation because it produces 'a useful, concrete and tangible result" – *a final share price momentarily fixed for recording purposes and even accepted and relied upon by regulatory authorities and in subsequent trades.* (emphasis added) *State Street Bank* at 1601.

10. True enough, that case later eliminated the "business method exception" in order to show that business methods were not per se nonstatutory, but the court clearly *did not* go so far as to make business methods *per se statutory*. A plain reading of the excerpt above shows that the Court was *very specific* in its definition of the new *practical application*. It would have been much easier for the court to say that "business methods were per se statutory" than it was to define the practical application in the case as "...the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price..."

11. The court was being very specific.

12. Additionally, the court was also careful to specify that the "useful, concrete and tangible result" it found was "a final share price momentarily fixed for recording purposes and even accepted and relied upon by regulatory authorities and in subsequent trades." (i.e. the trading activity is the further practical use of the real world monetary data beyond the transformation in the computer – i.e., "post-processing activity".)

13. Applicant cites no such specific results to define a useful, concrete and tangible result. Neither does Applicant specify the associated practical application with the kind of specificity the Federal Circuit used.

14. Furthermore, in the case *In re Warmerdam*, the Federal Circuit held that:

> ...[T]he dispositive issue for assessing compliance with Section 101 in this case is whether the claim is for a process that goes beyond simply manipulating 'abstract ideas' or 'natural phenomena' ... As the Supreme Court has made clear, '[a]n idea of itself is not patentable, ... *taking several abstract ideas and manipulating them together adds nothing to the basic equation*. In re Warmerdam 31 USPQ2d at 1759 (emphasis added).

15. Since the Federal Circuit held in *Warmerdam* that this is the "dispositive issue" when it judged the usefulness, concreteness, and tangibility of the claim limitations in that case, Examiner in the present case views this holding as the dispositive issue for determining whether a claim is "useful, concrete, and tangible" in similar cases. Accordingly, the Examiner finds that Applicant manipulated a set of abstract "goals" to solve purely algorithmic problems in the abstract (i.e., what *kind* of "goal" is used? Algebraic word problems? Boolean logic problems? Fuzzy logic algorithms? Probabilistic word problems? Philosophical ideas? Even vague expressions, about which even reasonable persons could differ as to their meaning? Combinations thereof?) Clearly, a claim for manipulation of "goals" is provably even more abstract (and thereby less limited in practical application) than pure "mathematical algorithms" which the Supreme Court has held are per se nonstatutory – in fact, it *includes* the expression of nonstatutory mathematical algorithms.

16. Since the claims are not limited to exclude such abstractions, the broadest reasonable interpretation of the claim limitations includes such abstractions. Therefore, the claims are impermissibly abstract under 35 U.S.C. 101 doctrine.

17. Since *Warmerdam* is within the *Alappat-State Street Bank* line of cases, it takes the same view of "useful, concrete, and tangible" the Federal Circuit applied in *State Street Bank*. Therefore, under *State Street Bank*, this could not be a "useful, concrete and tangible result". There is only manipulation of abstract ideas.

18. The Federal Circuit validated the use of *Warmerdam* in its more recent *AT&T Corp. v. Excel Communications, Inc.* decision. The Court reminded us that:

> Finally, **the decision in In re Warmerdam**, 33 F.3d 1354, 31 USPQ2d 1754 (Fed. Cir. 1994) **is not to the contrary**. *** The court found that the claimed process did nothing more than manipulate basic mathematical constructs and concluded that **'taking several abstract ideas and manipulating them together adds nothing to the basic equation'**; hence, the court held that the claims were properly rejected under §101 ... Whether one agrees with the court's conclusion on the facts, the **holding** of the case is a straightforward application of the basic principle that mere laws of nature, natural phenomena, and abstract ideas are not within the categories of inventions or discoveries that may be patented under §101. (emphasis added) AT&T Corp. v. Excel Communications, Inc., 50 USPQ2d 1447, 1453 (Fed. Cir. 1999).

19. Remember that in *In re Warmerdam*, the Court said that this was the dispositive issue to be considered. In the *AT&T* decision cited above, the Court reaffirms that this is the issue for assessing the "useful, concrete, and tangible" nature of a set of claims under 101 doctrine. Accordingly, Examiner views the *Warmerdam* holding as the dispositive issue in this analogous case.

20. The fact that the invention is merely the manipulation of *abstract ideas* is clear. The data referred to by Applicant's word "goal" is simply an abstract construct that does not limit the claims to the transformation of real world data (such as monetary data or heart rhythm data) by some disclosed process. Consequently, the necessary conclusion under *AT&T, State Street* and *Warmerdam,* is straightforward and clear. The claims

take several abstract ideas (i.e., "goals" in the abstract) and manipulate them together adding nothing to the basic equation. Claims 1-17 and 19-54 are, thereby, rejected under 35 U.S.C. 101.

21. Regarding the "system" recitals in claims 10 – 17, 28-36, 46-54, the invention is still found to be nonstatutory. Any other finding would be at variance with current case law. Specifically, the Federal Circuit held in *AT&T v. Excel*, 50 USPQ2d 1447 (Fed. Cir. 1999) that:

> Whether stated implicitly or explicitly, we consider the scope of Section 101 to be **the same regardless of the form** – machine or process – in which a particular claim is drafted. AT&T v. Excel, 50 USPQ2d 1447, 1452 citing In re Alappat, 33 F.3d at 1581, 31 USPQ2d at 1589 (Rader, J., concurring) (emphasis added.)

22. Examiner considers the scope of Section 101 to be the same regardless of whether Applicant *claims* a "process", "machine", or "product of manufacture". While the "system" recitals in the preambles of claims 10 – 17, 28-36, 46-54 make the claims ostensibly drawn to be "apparatus" claims, they are insufficient by themselves to limit the claims to statutory subject matter. Examiner's position is clearly consistent with *Alappat,* and *AT&T* and is implicitly consistent with *Warmerdam* and *State Street.* Accordingly, those claims are also properly rejected.

Claim Rejections - 35 USC § 112

23. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

24. Claims 1-17 and 19-54 are rejected under 35 USC 112, first paragraph because current case law (and accordingly, the MPEP) require such a rejection if a 101 rejection is given because when Applicant has not in fact disclosed the practical application for the invention, as a matter of law there is no way Applicant could have disclosed *how* to practice the *undisclosed* practical application. This is how the MPEP puts it:

> ("The how to use prong of section 112 **incorporates as a matter of law** the requirement of 35 U.S.C. 101 that the specification disclose as a matter of fact a practical utility for the invention.... If the application fails as a matter of fact to satisfy 35 U.S.C. § 101, then the application **also fails as a matter of law** to enable one of ordinary skill in the art to use the invention under 35 U.S.C. § 112."); In re Kirk, 376 F.2d 936, 942, 153 USPQ 48, 53 (CCPA 1967) ("Necessarily, compliance with § 112 requires a description of how to use presently useful inventions, **otherwise an applicant would anomalously be required to teach how to use a useless invention**.").See, MPEP 2107.01(IV), quoting In re Kirk (emphasis added).

Therefore, claims 1-17 and 19-54 are rejected on this basis.

25. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

26. Claims 1-17 and 19-54 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

27. Specifically, Applicant has amended the language to recite: "...the goal being associated with a training objective of a student." The word "associated" is undefined and it is unclear whether this word limits the claims to statutory subject matter. Applicant asserts that the "training objective of a student" "limitation" makes the claims statutory, but it is unclear what this phrase has to do with the invention beyond a vague "association" with it. Is the association a close one where the goal is the "training objective", or is it a loose one where they were simply made or considered at the same time...or even just some mental association. Applicant's added phraseology does not limit the claim to statutory subject matter and makes the disclosure vague in that it fails to particularly point out and distinctly claim the subject matter which Applicant regards as the invention under 35 U.S.C. 112 doctrine.

Claim Rejections - 35 USC § 102

28. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

29. Claims 1-6, 10-15, 19, 28, 37, 38, and 46 are rejected under 35 U.S.C. 102(b) as being anticipated by Nichols et al[1]. Specifically:

Claim 1

[1] Nichols et al (U.S. Patent Number 5,987,443; dated 16 NOV 1999; class 706; subclass 011).

Claim 1's "(a) receiving a goal, the goal being associated with a training objective of a student;" is anticipated by Nichols et al, claim 1, where it recites:

> (a) accessing the information in the spreadsheet object component of the rule-based expert system to determine presentation information indicative of a goal;

"Information indicative of a goal" includes any written expression that communicates a goal. The system "received" the goal in the "spreadsheet object."

Claim 1's "(b) **integrating** information that **motivates** accomplishment of the goal;" is anticipated by Nichols et al, claim 1, where it recites:

> "(b) utilizing the information in the spreadsheet object component of the rule-based expert system to **integrate** goal-based learning **information** in a structured, dynamic business simulation designed by a profiling component to **motivate** accomplishment of the goal; and"

Claim 1's "(c) **evaluating** the progress toward the goal and provides **feedback** that further **motivates** accomplishment of the goal; and" is anticipated by Nichols et al, claim 1, where it recites:

> (c) monitoring answers to questions posed to **evaluate** progress toward the goal utilizing the spreadsheet object component of the rule-based expert system and **providing** dynamic, goal-based, remediation learning information **feedback** from a remediation object component including a mathematical modeling tool which simulates business outcomes of collective actions over a period of time, a knowledge system which organizes and presents packaged knowledge much like an online text book and a software tutor comprising an artificial intelligence engine which generates individualized coaching messages based on decisions made by a user that further **motivates** accomplishment of the goal."

Claim 1's "(d) adjusting the feedback based on progress of the student toward the goal." is anticipated by Nichols et al, claim 1, where it recites:

> (c) monitoring answers to questions posed to evaluate progress toward the goal utilizing the spreadsheet object component of the rule-based expert system and providing dynamic, goal-based, remediation learning information **feedback** from a remediation object component including a mathematical modeling tool which simulates business outcomes of collective actions over a period of time, a knowledge system which organizes and presents packaged knowledge much like an online text book and a software tutor comprising an artificial intelligence engine which **generates** individualized **coaching messages** based on decisions made by a user that further motivates accomplishment of the goal.

Claim 2

Claim 2's "A computer-implemented method for creating a presentation as recited in claim 1, including evaluating the progress based on the number of help sessions the student accesses." is anticipated by Nichols et al, claim 1, where it recites:

> (c) monitoring answers to questions posed to **evaluate** progress toward the goal utilizing the spreadsheet object component of the rule-based expert system and providing dynamic, goal-based, remediation learning information feedback from a remediation object component including a mathematical modeling tool which simulates business outcomes of collective actions over a period of time, a knowledge system which organizes and presents packaged knowledge much like an online text book and a software tutor comprising an artificial intelligence engine which generates individualized coaching messages based on **decisions made by a user** that further motivates accomplishment of the goal."

Claim 3

Claim 3's "A computer-implemented method for creating a presentation as recited in claim 2, including the step of evaluating the progress based on the work completed by the student." is anticipated by Nichols et al, claim 1, where it recites:

> (c) monitoring answers to questions posed to **evaluate** progress toward the goal utilizing the spreadsheet object component of the rule-based expert system and providing dynamic, goal-based, remediation learning information feedback from a remediation object component including a mathematical modeling tool which simulates business outcomes of collective actions over a period of time, a knowledge system which organizes and presents packaged knowledge much like an online text book and a software tutor comprising an artificial intelligence engine which generates individualized coaching messages based on **decisions made by a user** that further motivates accomplishment of the goal."

Claim 4

Claim 4's "A computer-implemented method for creating a presentation as recited in claim 1, including the step of evaluating the progress based on the number of changes." is anticipated by Nichols et al, claim 1, where it recites:

> (c) monitoring answers to questions posed to **evaluate** progress toward the goal utilizing the spreadsheet object component of the rule-based expert system and providing dynamic, goal-based, remediation learning information feedback from a remediation object component including a mathematical modeling tool which simulates business outcomes of collective actions over a period of time, a knowledge system which organizes and presents packaged knowledge much like an online text book and a software tutor comprising an artificial intelligence engine which generates individualized coaching messages based on **decisions made by a user** that further motivates accomplishment of the goal."

Claim 5

Claim 5's "A computer-implemented method for creating a presentation as recited in claim 1, including the step of evaluating the progress based on the amount of rework." is anticipated by Nichols et al, claim 1, where it recites:

> (c) monitoring answers to questions posed to **evaluate** progress toward the goal utilizing the spreadsheet object component of the rule-based expert system and providing dynamic, goal-based, remediation learning information feedback from a remediation object component including a mathematical modeling tool which simulates business outcomes of

> collective actions over a period of time, a knowledge system which organizes and presents packaged knowledge much like an online text book and a software tutor comprising an artificial intelligence engine which generates individualized coaching messages based on **decisions made by a user** that further motivates accomplishment of the goal."

Claim 6

Claim 6's "A computer-implemented method for creating a presentation as recited in claim 1, including the step of evaluating the progress based on the aggregate condition of the work." is anticipated by Nichols et al, claim 1, where it recites:

> (c) monitoring answers to questions posed to **evaluate** progress toward the goal utilizing the spreadsheet object component of the rule-based expert system and providing dynamic, goal-based, remediation learning information feedback from a remediation object component including a mathematical modeling tool which simulates business outcomes of collective actions over a period of time, a knowledge system which organizes and presents packaged knowledge much like an online text book and a software tutor comprising an artificial intelligence engine which generates individualized coaching messages based on **decisions made by a user** that further motivates accomplishment of the goal."

Claim 10

Claim 10's "(a) a processor;" is anticipated by Nichols et al, claim 10, where it recites: "(a) a processor;

Claim 10's "(b) a memory that stores information under the control of the processor;" is anticipated by Nichols et al, claim 10, where it recites:

> (d) a memory that stores information in the spreadsheet object component of the rule-based expert system under the control of the processor that includes data, calculations required for the simulation and communication information;

Claim 10's "(c) logic that receives a goal;" is anticipated by Nichols et al, claim 10, where it recites:

> (e) logic that accesses the data in the spreadsheet object component of the rule-based expert system to determine presentation information indicative of a goal;

Claim 10's "(d) logic that integrates information that motivates accomplishment of the goal;" is anticipated by Nichols et al, claim 10, where it recites:

> (f) logic that utilizes the information in the spreadsheet object component of the rule-based expert system to integrate goal-based learning information in a structured, dynamic business simulation designed by a profiling component to motivate accomplishment of the goal; and

Claim 10's "(e) logic that evaluates the progress toward the goal and provides feedback that further motivates accomplishment of the goal; and" is anticipated by Nichols et al, claim 10, where it recites:

> (g) logic that monitors answers to questions posed to evaluate progress toward the goal utilizing the spreadsheet object component of the rule-based expert system and provides goal-based, remediation learning information feedback from a remediation object component including a mathematical modeling tool which simulates business outcomes of collective actions over a period of time, a knowledge system which organizes and presents packaged knowledge much like an online text book and a software tutor comprising an artificial intelligence engine which generates individualized coaching messages based on decisions made by a user that further motivates accomplishment of the goal.

Claim 10's "(f) logic that adjusts the feedback based on progress of the student toward the goal." is anticipated by Nichols et al, claim 10, where it recites:

> (g) logic that monitors answers to questions posed to evaluate progress toward the goal utilizing the spreadsheet object component of the rule-based expert system and provides goal-based, remediation learning information feedback from a remediation object component including a mathematical modeling tool which simulates business outcomes of collective actions over a period of time, a knowledge system which organizes and presents packaged knowledge much like an online text book and a software tutor comprising an artificial intelligence engine which generates individualized coaching messages based on decisions made by a user that further motivates accomplishment of the goal.

Claim 11

Claim 11's "An apparatus that creates a presentation as recited in claim 10, including logic that evaluates the progress based on the number of help sessions the student accesses." is anticipated by Nichols et al, claim 1, where it recites:

> (c) monitoring answers to questions posed to **evaluate** progress toward the goal utilizing the spreadsheet object component of the rule-based expert system and providing dynamic, goal-based, remediation learning information feedback from a remediation object component including a mathematical modeling tool which simulates business outcomes of collective actions over a period of time, a knowledge system which organizes and presents packaged knowledge much like an online text book and a software tutor comprising an artificial intelligence engine which generates individualized coaching messages based on **decisions made by a user** that further motivates accomplishment of the goal."

Claim 12

Claim 12's "An apparatus that creates a presentation as recited in claim 10, including logic that evaluates the progress based on the work completed by the student." is anticipated by Nichols et al, claim 1, where it recites:

> (c) monitoring answers to questions posed to **evaluate** progress toward the goal utilizing the spreadsheet object component of the rule-based

> expert system and providing dynamic, goal-based, remediation learning information feedback from a remediation object component including a mathematical modeling tool which simulates business outcomes of collective actions over a period of time, a knowledge system which organizes and presents packaged knowledge much like an online text book and a software tutor comprising an artificial intelligence engine which generates individualized coaching messages based on **decisions made by a user** that further motivates accomplishment of the goal."

Claim 13

Claim 13's "An apparatus that creates a presentation as recited in claim 10, including logic that evaluates the progress based on the changes made." is anticipated by Nichols et al, claim 1, where it recites:

> (c) monitoring answers to questions posed to **evaluate** progress toward the goal utilizing the spreadsheet object component of the rule-based expert system and providing dynamic, goal-based, remediation learning information feedback from a remediation object component including a mathematical modeling tool which simulates business outcomes of collective actions over a period of time, a knowledge system which organizes and presents packaged knowledge much like an online text book and a software tutor comprising an artificial intelligence engine which generates individualized coaching messages based on **decisions made by a user** that further motivates accomplishment of the goal."

Claim 14

Claim 14's "An apparatus that creates a presentation as recited in claim 10, including logic that evaluates the progress based on the amount of rework." is anticipated by Nichols et al, claim 1, where it recites:

> (c) monitoring answers to questions posed to **evaluate** progress toward the goal utilizing the spreadsheet object component of the rule-based expert system and providing dynamic, goal-based, remediation learning information feedback from a remediation object component including a mathematical modeling tool which simulates business outcomes of collective actions over a period of time, a knowledge system which

> organizes and presents packaged knowledge much like an online text book and a software tutor comprising an artificial intelligence engine which generates individualized coaching messages based on **decisions made by a user** that further motivates accomplishment of the goal."

Claim 15

Claim 15's "An apparatus that creates a presentation as recited in claim 10, including logic that evaluates the progress based on the aggregate condition of the work." is anticipated by Nichols et al, claim 1, where it recites:

> (c) monitoring answers to questions posed to **evaluate** progress toward the goal utilizing the spreadsheet object component of the rule-based expert system and providing dynamic, goal-based, remediation learning information feedback from a remediation object component including a mathematical modeling tool which simulates business outcomes of collective actions over a period of time, a knowledge system which organizes and presents packaged knowledge much like an online text book and a software tutor comprising an artificial intelligence engine which generates individualized coaching messages based on **decisions made by a user** that further motivates accomplishment of the goal."

Claim 19

Claim 19's "(a) presenting information indicative of a goal, the goal being associated with a training objective of a student;" is anticipated by Nichols et al, claim 1, where it recites:

> (a) accessing the information in the spreadsheet object component of the rule-based expert system to determine presentation information indicative of a goal;"

Claim 19's "(b) integrating information that motivates accomplishment of the goal in a simulated environment goal for use in the presentation; and" is anticipated by Nichols et al, claim 1, where it recites:

> (b) utilizing the information in the spreadsheet object component of the rule-based expert system to **integrate** goal-based learning information in a structured, dynamic business simulation designed by a profiling component to **motivate** accomplishment of the goal; and

Claim 19's "(c) monitoring progress toward the goal and providing feedback that further motivates accomplishment of the goal in the simulated environment" is anticipated by Nichols et al, claim 1, where it recites:

> (c) **monitoring** answers to questions posed to **evaluate** progress toward the goal utilizing the spreadsheet object component of the rule-based expert system and providing dynamic, goal-based, remediation learning information feedback from a remediation object component including a mathematical modeling tool which simulates business outcomes of collective actions over a period of time, a knowledge system which organizes and presents packaged knowledge much like an online text book and a software tutor comprising an artificial intelligence engine which generates individualized **coaching** messages based on decisions made by a user that further **motivates** accomplishment of the goal.

Claim 28

Claim 28's "(a) a processor;" is anticipated by Nichols et al, claim 10, where it recites: "(a) a processor;"

Claim 28's "(b) a memory that stores information under the control of the processor;" is anticipated by Nichols et al, claim 10, where it recites:

> (d) a memory that stores information in the spreadsheet object component of the rule-based expert system under the control of the

> processor that includes data, calculations required for the simulation and communication information;

Claim 28's "(c) logic that presents information indicative of a goal, the goal being associated with a training objective of a student;" is anticipated by Nichols et al, claim 10, where it recites:

> (e) logic that accesses the data in the spreadsheet object component of the rule-based expert system to determine presentation information indicative of a goal;

Claim 28's "(d) logic that **integrates** information that **motivates** accomplishment of the goal in a **simulated** environment for use in the presentation; and" is anticipated by Nichols et al, claim 10, where it recites:

> (f) logic that utilizes the information in the spreadsheet object component of the rule-based expert system to **integrate** goal-based learning **information** in a structured, dynamic business simulation designed by a profiling component to **motivate** accomplishment of the goal; and

Claim 28's "(e) logic that monitors progress toward the goal and provides feedback that further motivates accomplishment of the goal in the simulated environment." is anticipated by Nichols et al, claim 10, where it recites:

> (g) logic that **monitors** answers to questions posed to **evaluate** progress toward the goal utilizing the spreadsheet object component of the rule-based expert system and provides goal-based, remediation learning information feedback from a remediation object component including a mathematical modeling tool which simulates business outcomes of collective actions over a period of time, a knowledge system which organizes and presents packaged knowledge much like an online text book and a software tutor comprising an artificial intelligence engine

> which generates individualized coaching messages based on decisions made by a user that further **motivates** accomplishment of the goal.

Claim 37

Claim 37's "(a) receiving indicia representative of a goal into a model, the goal being associated with a training objective of a plurality of students;" is anticipated by Nichols et al, claim 10, where it recites:

> (e) logic that accesses the data in the spreadsheet object component of the rule-based expert system to determine presentation information indicative of a goal;

Claim 37's " (b) integrating information that provides assistance with achieving the goal into a tutor for use in the presentation;" is anticipated by Nichols et al, claim 10, where it recites:

> (g) logic that **monitors** answers to questions posed to **evaluate** progress toward the goal utilizing the spreadsheet object component of the rule-based expert system and provides goal-based, remediation learning information feedback from a remediation object component including a mathematical modeling tool which simulates business outcomes of collective actions over a period of time, a knowledge system which organizes and presents packaged knowledge much like an online text book and a software tutor comprising an artificial intelligence engine which generates **individualized coaching messages** based on decisions made by a user that further motivates accomplishment of the goal.

Claim 37's "(c) **monitoring** progress of the plurality of students toward the goal; and" is anticipated by Nichols et al, claim 10, where it recites:

> (g) logic that **monitors** answers to questions posed to **evaluate** progress toward the goal utilizing the spreadsheet object component of the rule-based expert system and provides goal-based, remediation learning

> information feedback from a remediation object component including a mathematical modeling tool which simulates business outcomes of collective actions over a period of time, a knowledge system which organizes and presents packaged knowledge much like an online text book and a software tutor comprising an artificial intelligence engine which **generates** individualized coaching messages based on decisions made by a user that further **motivates** accomplishment of the goal.

Claim 37's "(d) providing feedback that further assists the plurality of students in accomplishing the goal." is anticipated by Nichols et al, claim 10, where it recites:

> (g) logic that **monitors** answers to questions posed to **evaluate** progress toward the goal utilizing the spreadsheet object component of the rule-based expert system and provides goal-based, remediation learning information feedback from a remediation object component including a mathematical modeling tool which simulates business outcomes of collective actions over a period of time, a knowledge system which organizes and presents packaged knowledge much like an online text book and a software tutor comprising an artificial intelligence engine which **generates** individualized coaching messages based on decisions made by a user that further **motivates** accomplishment of the goal.

Claim 38

Claim 38's "(a) receiving indicia representative of a plurality of goals into a model;" is anticipated by Nichols et al, claim 10, where it recites:

> (e) logic that accesses the data in the spreadsheet object component of the rule-based expert system to determine presentation information indicative of a goal;

Claim 38's "(b) integrating information that provides assistance with achieving the plurality of goals into a tutor; and" is anticipated by Nichols et al, claim 10, where it recites:

> (g) logic that **monitors** answers to questions posed to **evaluate** progress toward the goal utilizing the spreadsheet object component of the rule-based expert system and provides goal-based, remediation learning

> information feedback from a remediation object component including a mathematical modeling tool which simulates business outcomes of collective actions over a period of time, a knowledge system which organizes and presents packaged knowledge much like an online text book and a software tutor comprising an artificial intelligence engine which **generates** individualized coaching messages based on decisions made by a user that further **motivates** accomplishment of the goal.

Claim 38's "(c) monitoring progress of a student toward the goal and providing feedback that assists the student in accomplishing the plurality of goals." is anticipated by Nichols et al, claim 10, where it recites:

> (g) logic that **monitors** answers to questions posed to **evaluate** progress toward the goal utilizing the spreadsheet object component of the rule-based expert system and provides goal-based, remediation learning information feedback from a remediation object component including a mathematical modeling tool which simulates business outcomes of collective actions over a period of time, a knowledge system which organizes and presents packaged knowledge much like an online text book and a software tutor comprising an artificial intelligence engine which **generates** individualized coaching messages based on decisions made by a user that further **motivates** accomplishment of the goal.

Claim 46

Claim 46's "(a) a processor;" is anticipated by Nichols et al, claim 10, where it recites "(a) a processor;"

Claim 46's "(b) a memory that stores information under the control of the processor;" is anticipated by Nichols et al, claim 10, where it recites:

> (d) a **memory** that **stores** information in the spreadsheet object component of the rule-based expert system under the **control** of the processor that includes data, calculations required for the simulation and communication information;

Claim 46's "(c) logic that receives indicia representative of a plurality of goals into a model, the plurality of goals being associated with a training objective of a student;" is anticipated by Nichols et al, claim 10, where it recites:

> (e) logic that accesses the data in the spreadsheet object component of the rule-based expert system to determine presentation information indicative of a goal;

Claim 46's "(d) logic that integrates information that provides assistance with achieving the plurality of goals into a tutor for use in the presentation; and" is anticipated by Nichols et al, claim 10, where it recites:

> (f) logic that utilizes the information in the spreadsheet object component of the rule-based expert system to integrate goal-based learning information in a structured, dynamic business simulation designed by a profiling component to motivate accomplishment of the goal; and

Claim 46's "(e) logic that monitors progress of the student toward one If the plurality of goals; and" is anticipated by Nichols et al, claim 10, where it recites:

> (g) logic that **monitors** answers to questions posed to **evaluate** progress toward the goal utilizing the spreadsheet object component of the rule-based expert system and provides goal-based, remediation learning information feedback from a remediation object component including a mathematical modeling tool which simulates business outcomes of collective actions over a period of time, a knowledge system which organizes and presents packaged knowledge much like an online text book and a software tutor comprising an artificial intelligence engine which **generates** individualized coaching messages based on decisions made by a user that further **motivates** accomplishment of the goal.

Claim 46's "(f) logic that **assists the student** in accomplishing the plurality of goals" is anticipated by Nichols et al, claim 10, where it recites:

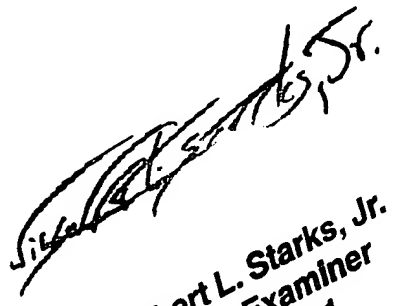
(g) logic that **monitors** answers to questions posed to **evaluate** progress toward the goal utilizing the spreadsheet object component of the rule-based expert system and provides goal-based, remediation learning information **feedback** from a remediation object component including a mathematical modeling tool which simulates business outcomes of collective actions over a period of time, a knowledge system which organizes and presents packaged knowledge much like an online text book and a software tutor comprising an artificial intelligence engine which **generates** individualized **coaching messages** based on decisions made by a user that further **motivates** accomplishment of the goal.

Conclusion

30. This action is NONFINAL. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Wilbert L. Starks, Jr. whose telephone number is (571) 272-3691.

Alternatively, inquiries may be directed to the following:

S. P. E. Anthony Knight	**(571) 272-3687**
Official (FAX)	**(571) 273-8300**



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22 July 2005